

Electronically Recorded

Tarrant County Texas

Official Public Records

7/15/2010 2:28 PM

D210171375



PGS 7 \$40.00

TX - PAID UP

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OF THE FOLLOWING INFORMATION FROM THIS INSTRUMENT BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

## NO SURFACE USE PAID UP OIL AND GAS LEASE

THIS LEASE AGREEMENT (this "Lease") is made as of the 15<sup>th</sup> day of July, 2010, between **Joseph P. Burns**, a single person, as Lessor, whose address is **8302 Jake's Place, Alexandria, Virginia 22309** and **XTO Energy Inc.**, whose address is **810 Houston St., Fort Worth, Texas 76102**, as Lessee. All the printed portions of this Lease were prepared by Lessee, but all other provisions (including the completion of blank spaces) were prepared jointly by Lessor and Lessee.

1. **Leased Premises.** In consideration of a cash bonus paid upon execution of this Lease, and the covenants herein, Lessor hereby grants, leases and lets exclusively to Lessee the **land described on the Exhibit "A" attached hereto** (the "leased premises") in Tarrant County, Texas (including any interests therein which Lessor may hereafter acquire by reversion, prescription or otherwise), for the purpose of exploring for, developing, producing and marketing oil and gas. For purposes of this Lease, "oil and gas" means oil, gas and other liquid and gaseous hydrocarbons and their constituent elements produced through a well bore. "Oil" includes all condensate, distillate and other liquid and gaseous hydrocarbons produced through a well bore. "Gas" includes helium, carbon dioxide and other commercial gases, as well as hydrocarbon gases. Expressly excluded from this Lease are lignite, coal, sulfur and other like minerals. The leased premises shall include all strips and gores, streets, easements, highways and alleyways adjacent thereto. Lessor agrees to execute at Lessee's request any additional or supplemental instruments reasonably necessary for a more complete or accurate description of the leased premises. In the event Lessor owns any additional acreage than that for which bonus was originally paid, Lessee shall pay additional bonus at a rate per acre not less than the rate per acre on which bonus was originally paid when this Lease was acquired. For the purpose of determining the amount of any shut-in royalties hereunder, the number of gross acres specified on the Exhibit "A" shall be deemed correct, whether actually more or less.

2. **Term.** This Lease is a "paid up" lease requiring no rentals. Subject to the other provisions contained herein, this Lease shall be for a term of **forty-eight (48) months** from the date hereof (the "primary term"), and for as long thereafter as oil or gas or other substances covered hereby are produced in paying quantities from the leased premises or from lands pooled therewith, or this Lease is otherwise maintained in effect pursuant to the provisions hereof.

3. **Royalty.** Royalties on oil, gas and other substances produced and saved hereunder shall be paid by Lessee to Lessor as follows: (a) for oil and other liquid hydrocarbons separated at Lessee's separator facilities, the royalty shall be **twenty five percent (25%)** of such production, to be delivered at Lessee's option to Lessor at the wellhead or to Lessor's credit at the oil purchaser's transportation facilities, provided that Lessee shall have the continuing right to purchase such production at the wellhead market price then prevailing in the same field (or if there is no such price then prevailing in the same field, then in the nearest field in which there is a prevailing price) for production of similar grade and gravity; and (b) for gas (including casinghead gas) and all other substances covered hereby, the royalty shall be **twenty five percent (25%)** of the proceeds realized by Lessee from the sale thereof, computed at the point of sale, less a proportionate part of ad valorem taxes and production, severance or other excise taxes, provided that Lessee shall have the continuing right to purchase such production at the prevailing wellhead market price paid for production of similar quality in the same field (or if there is no such price then prevailing in the same field, then in the nearest field in which there is such a prevailing price) pursuant to comparable purchase contracts entered into on the same or nearest preceding date as the date on which Lessee commences its purchases hereunder. If at the end of the primary term or any time thereafter one or more wells on the leased premises or lands pooled therewith are capable of producing oil or gas or other substances covered hereby in paying quantities, but such well or wells are either shut-in or production therefrom is not being sold by Lessee, such well or wells shall nevertheless be deemed to be producing in paying quantities for the purpose of maintaining this Lease. A well that has been drilled but not fraced, in the Barnett Shale Formation, shall be deemed capable of producing in paying quantities. If for a period of ninety (90) consecutive days such well or wells are shut-in or production therefrom is not being sold by Lessee, then Lessee shall pay shut-in royalty of twenty five dollars (\$25.00) per acre then covered by this Lease on or before the end of said 90-day period and thereafter on or before each anniversary of the end of said 90- day period while the well or wells are shut-in or production therefrom is not being sold by Lessee; provided, however, that if this Lease is otherwise being maintained by operations, or if production is being sold by Lessee from another well or wells on the leased premises or lands pooled therewith, no shut-in

royalty shall be due until the end of the 90-day period next following cessation of such operations or production. Notwithstanding anything to the contrary herein, it is expressly understood and agreed that after the expiration of the primary term, Lessee shall not have the right to continue this Lease in force by payment of shut-in royalty for more than a single period of up to two (2) consecutive years.

Royalties on oil, gas and other substances produced and saved hereunder which are processed in a processing plant in which Lessee, or an affiliate of Lessee, has a direct or indirect interest, shall be calculated based upon the higher of the proceeds received or the market value of the products so processed. Similarly, on oil, gas and other substances produced and saved hereunder which are sold to Lessee, or an affiliate of Lessee, royalties shall be paid based upon the higher of the market value of the products so sold and the proceeds received by Lessee for said products. Notwithstanding anything to the contrary herein, except for nonaffiliated third-party charges incurred by Lessee, in no event shall any of Lessor's royalty bear any part of the costs of production or any post-production costs, including costs of lifting, gathering, dehydration, compression, separation, delivery, transportation, manufacture, processing, treating or marketing, or for construction, operation or depreciation of any plant or other facility or equipment for processing or treating oil or gas produced from the leased premises or lands pooled therewith. In no event shall Lessor receive a price greater than or less than Lessee in sales to nonaffiliates.

As used herein, "affiliate" means (i) a corporation, joint venture, partnership or other entity that owns more than ten percent (10%) of the outstanding voting interest of Lessee or in which Lessee owns more than ten percent (10%) of the outstanding voting interest; or (ii) a corporation, joint venture, partnership or other entity in which, together with Lessee, more than ten percent (10%) of the outstanding voting interest of both the Lessee and the other corporation, joint venture, partnership or other entity is owned or controlled by the same person or group of persons.

4. Payments. All shut-in or other royalty payments under this Lease shall be paid or tendered to Lessor at the above address, or at such address or to Lessor's credit at such depository institution as Lessor may provide written notice of from time to time. All payments or tenders may be made in currency, by check or by draft. Initial bonus monies shall be paid to Lessor by check upon Lessee's receipt of Lessor's executed lease.

5. Continuous Operations. If Lessee drills a well which is incapable of producing in paying quantities (a "dry hole") on the leased premises or lands pooled therewith, or if all production (whether or not in paying quantities) permanently ceases from any cause, including a revision of unit boundaries pursuant to the provisions of Section 6 or the action of any governmental authority, then in the event this Lease is not otherwise being maintained in force it shall nevertheless remain in force if Lessee commences operations for reworking an existing well or for drilling an additional well or for otherwise obtaining or restoring production on the leased premises or lands pooled therewith within one hundred twenty (120) days after completion of operations on such dry hole or within one hundred and twenty (120) days after such cessation of all production. If at the end of the primary term, or at any time thereafter, this Lease is not otherwise being maintained in force but Lessee is then engaged in drilling, reworking or any other operations reasonably calculated to obtain or restore production therefrom, this Lease shall remain in force so long as any one or more of such operations are prosecuted with no cessation of more than ninety (90) consecutive days, and if any such operations result in the production of oil or gas or other substances covered hereby, as long thereafter as there is production in paying quantities from the leased premises or lands pooled therewith. After completion of a well capable of producing in paying quantities hereunder, Lessee shall drill such additional wells on the leased premises or lands pooled therewith as a reasonably prudent operator would drill under the same or similar circumstances (a) to develop the leased premises as to formations then capable of producing in paying quantities on the leased premises or lands pooled therewith, or (b) to protect the leased premises from uncompensated drainage by any well or wells located on other lands not pooled therewith. There shall be no covenant to drill exploratory wells or any additional wells except as expressly provided herein.

6. Pooling. Lessee shall have the right but not the obligation to pool all or any part of the leased premises or interests therein with any other lands or interests, as to any or all depths or zones, and as to any or all substances covered by this lease, either before or after the commencement of production, whenever Lessee deems it necessary or proper to do so in order to prudently develop or operate the leased premises, whether or not similar pooling authority exists with respect to such other lands or interests; provided, however, that the entire leased premises covered by this Lease shall be included in any unit created pursuant to the pooling authority granted herein. The unit formed by such pooling for an oil well which is not a horizontal completion shall not exceed eighty (80) acres plus a maximum acreage tolerance of ten percent (10%), and for a gas well or a horizontal completion shall not exceed six hundred forty (640) acres plus a maximum acreage tolerance of ten percent (10%); provided that a larger unit may be formed for all oil

well or gas well or horizontal completion to conform to any well spacing or density pattern that may be prescribed or permitted by any governmental authority having jurisdiction to do so. For the purpose of the foregoing, the terms "oil well" and "gas well" shall have the meanings prescribed by applicable law or the appropriate governmental authority, or, if no definition is so prescribed, "oil well" means a well with an initial gas-oil ratio of less than 100,000 cubic feet per barrel and "gas well" means a well with an initial gas-oil ratio of 100,000 cubic feet or more per barrel, based on 24-hour production test conducted under normal producing conditions using standard lease separator facilities or equivalent testing equipment; and "horizontal completion" means a well in which the horizontal component of the gross completion interval in the reservoir exceeds the vertical component thereof. In exercising its pooling rights hereunder, within ninety (90) days of first production, Lessee shall file of record a written declaration describing the unit and stating the effective date of pooling which may be retroactive to first production. In the event Lessor's acreage is included in a well, all of Lessor's acreage shall be included. Production, drilling or reworking operations anywhere on a unit which includes the leased premises shall be treated as if it were production, drilling or reworking operations on the leased premises, except that the production on which Lessor's royalty is calculated shall be that proportion of the total unit production which the net acreage covered by this Lease and included in the unit bears to the total gross acreage in the unit. Pooling in one or more instances shall not exhaust Lessee's pooling rights hereunder, and Lessee shall have the recurring right but not the obligation to revise any unit formed hereunder by expansion or contraction or both, either before or after commencement of production, in order to conform to the well spacing or density pattern prescribed or permitted by the governmental authority having jurisdiction, or to conform to any productive acreage determination made by such governmental authority. In making such a revision, Lessee shall file of record a written declaration describing the revised unit and stating the effective date of revision. If the leased premises are included in or excluded from the unit by virtue of such revision, the proportion of unit production oil royalties are payable hereunder shall thereafter be adjusted accordingly. In the absence of production in paying quantities from a unit, or upon permanent cessation thereof, Lessee may terminate the unit by filing of record a written declaration describing the unit and stating the date of termination. Pooling hereunder shall not constitute a cross-conveyance of interests.

7. Partial Interests. If Lessor owns less than the full mineral estate in all or any part of the leased premises, the royalties and shut-in royalties payable hereunder for any well on any part of the leased premises or lands pooled therewith shall be reduced to the proportion that Lessor's interest in such part of the leased premises bears to the full mineral estate in such part of the leased premises.

8. Assignment. The interest of either Lessor or Lessee hereunder may be assigned, devised or otherwise transferred in whole or in part, by area and/or by depth or zone, and the rights and obligations of the parties hereunder shall extend to their respective heirs, devisees, executors, administrators, successors and assigns; provided, however, if Lessee is to assign any part of this Lease it shall give written notice to the then president of the respective organizations, Fairmount Neighborhood Association at least thirty (30) days before doing so. No change in Lessor's ownership shall have the effect of reducing the rights or enlarging the obligations of Lessee hereunder, and no change in ownership shall be binding on Lessee until thirty (30) days after Lessee has been furnished the original or certified or duly authenticated copies of the documents establishing such change of ownership to the reasonable satisfaction of Lessee or until Lessor has satisfied the notification requirements contained in Lessee's usual form of division order. Except as otherwise stated herein, if Lessee transfers its interest hereunder in whole or in part, Lessee shall be relieved of all obligations thereafter arising with respect to the transferred interest, and failure of the transferee to satisfy such obligations with respect to the transferred interest shall not affect the rights of Lessee with respect to any interest not so transferred. If Lessee transfers a full or undivided interest in all or any portion of the area covered by this Lease, the obligation to pay or tender shut-in royalties hereunder shall be divided between Lessee and the transferee in proportion to the net acreage interest in this Lease then held by each.

9. Release and Vertical Pugh Clause. Lessee may, at any time and from time to time, deliver to Lessor in recordable form or file of record a written release of this Lease as to a full or undivided interest in all or any portion of the area covered by this Lease or any depths or zones there under, and shall thereupon be relieved of all obligations thereafter arising with respect to the interest so released. If Lessee releases all or an undivided interest in less than all of the area covered hereby, Lessee's obligation to pay or tender shut-in royalties shall be proportionately reduced in accordance with the net acreage interest retained hereunder. In any event, upon termination of this Lease, Lessee, its successors or assigns, shall deliver to Lessor a recordable release as to such portion or portions of this Lease which have terminated under the terms of this Lease. Upon the expiration of the primary term of this Lease, upon the expiration of any extension or renewal of the primary term, or after cessation of operations as provided herein, whichever occurs last, this Lease shall terminate as to all rights lying below one hundred feet (100') below either (1) the deepest depth drilled in any well drilled on the leased premises or on lands pooled therewith or (2) the stratigraphic equivalent of the base of the deepest formation producing or capable of producing in any well drilled on the leased premises

or on lands pooled therewith, whichever is the deepest; provided, however, if Lessee is then engaged in operations on the leased premises or on lands pooled therewith, this Lease shall remain in full force and effect as to all depths so long as no more than ninety (90) days elapse between operations.

10. Waiver of Surface Use. Notwithstanding anything to the contrary in this Lease, Lessee shall not enter upon the surface of, cross over, place any structure or building upon or conduct any operations (including but not limited to roads, drilling pads, pipelines, production equipment, flowlines, and geophysical/seismic operations) within 600 feet of the leased premises. The Lessee shall not place any gas compression station within 1000 feet from the boundaries of Fairmount Neighborhood. **NOTWITHSTANDING ANYTHING WITHIN THIS LEASE TO THE CONTRARY, LESSEE IS PROHIBITED AND SHALL NOT ESTABLISH A DRILL PAD SITE ON LAND BORDERING THE STREET OF EIGHTH AVENUE BETWEEN THE TWO SUBDIVISIONS NOR BORDERING THE TWO NEIGHBORHOOD SUBDIVISIONS OF BERKELEY PLACE AND RYAN PLACE. ANY SUCH ACTION BY LESSEE TO UTILIZE ANY EIGHTH AVENUE DRILL SITE LOCATION SHALL IMMEDIATELY SERVE TO VOID THIS LEASE IN ITS ENTIRETY WITH NO REFUND OF ANY BONUS MONIES BY LESSOR TO LESSEE, AND LESSEE UPON LESSOR'S REQUEST MUST EXECUTE AND RECORD A RELEASE OF LEASE WITHIN THIRTY (30) DAYS OF ANY SUCH WRITTEN REQUEST BY LESSOR.** Lessee shall only develop the leased premises by pooling, as provided herein, or by directional or horizontal drilling commenced from a surface location on other lands. Lessee shall make all reasonable efforts to comply with the Gas Drilling Ordinance of the City of Fort Worth limiting use to commercially designated routes and not to use residential or neighborhood streets or thoroughfares in developing the leased premises, any lands pooled therewith or otherwise.

11. Noise. No drilling or other operations shall produce a sound level (1) greater than 5dB above the ambient noise level when measured at any location within The Fairmount Neighborhood between the hours of 7:00 a.m. to 7:00 p.m. or (2) greater than 3dB above the ambient noise level when measured at any location within Fairmount Neighborhood between the hours of 7:00 p.m. to 7:00 a.m.; provided, however, that and adjustment to the noise standard set forth below in (1) and (2) may be permitted in accordance with the tolerance table from City of Fort Worth Ordinance set forth below. Sound level measurements shall be made with a sound level meter conforming, as a minimum, to the requirements of the American National Standards Institute. Sound level measurements shall be taken at a distance of between 4 and 6 feet above ground level. In the event that Lessor obtains a sound measurement exceeding that allowed by this Lease, Lessor shall notify Lessee in writing in conformity with the terms of this Lease. Lessee shall have 24 hours from the receipt of such notice to cure or cease any condition or operation which results in a sound level measurement not in conformity with this Lease. Any sound level measurement taken at any location within Fairmount Neighborhood shall be deemed to affect equally all Lessors within Fairmount Neighborhood, and any violation of the provisions relating to sound levels contained herein shall not be waived, modified, or terminated without the written consent and agreement of all Lessors within Fairmount Neighborhood.

Adjustments to the noise standards as set forth above in subsection of this section may be permitted in accordance with the following:

Permitted Increase (dBA)	Duration of Increase (minutes)*
5.....	15
10.....	5
15.....	1
20.....	less than 1

\*Cumulative minutes during any one hour

If Lessee utilizes any non-electric-powered equipment in its operations, Lessee shall take reasonable steps to muffle the sound therefrom by installing a noise suppression muffler or like equipment.

12. Regulatory Requirements and Force Majeure. Lessee's obligations under this Lease, whether express or implied, shall be subject to all applicable laws, rules, regulations and orders of any governmental authority having jurisdiction, including environmental regulations, setback requirements, restrictions on the drilling and production of wells, and the price of oil, gas and other substances covered hereby. To the extent any such laws, rules, regulations or orders are less restrictive than the terms of this Lease, this Lease shall control. When drilling, reworking, production or other operations are prevented or delayed by such laws, rules, regulations or orders, or by inability to obtain necessary permits, equipment, services, material, water, electricity, fuel, access or easements, or by fire, flood, adverse weather conditions, war, sabotage, rebellion, insurrection, riot, strike or labor disputes, or by inability to obtain a

satisfactory market for production or failure of purchasers or carriers to take or transport such production, on by any other cause not reasonably within Lessee's control, this Lease shall not terminate because of such prevention or delay, and at Lessee's option, the period of such prevention or delay shall be added to the term hereof. Lessee shall not be liable for breach of any express or implied covenants of this Lease when drilling, production or other operations are so prevented, delayed or interrupted.

**13. Indemnity.** Lessee hereby releases and discharges Lessor and the owner of the surface estate, along with their officers, employees, partners, agents, contractors, subcontractors, guests and invitees, and their respective heirs, successors and assigns (collectively the "Lessor Parties"), of and from all and any actions and causes of action of every nature, or other harm, including environmental harm, for which recovery of damages is sought, including, but not limited to, all losses and expenses which are caused by the activities of Lessee, its officers, employees and agents arising out of, incidental to or resulting from, the operations of or for Lessee on or under the leased premises or at the drill site or operations site or that may arise out of or be occasioned by Lessee's breach of any of the terms or provisions of this Lease, or by any other negligent or strictly liable act or omission of Lessee. Further, Lessee hereby agrees to be liable for, exonerate, indemnify, defend and hold harmless the Lessor Parties against any and all claims, liabilities, losses, damages, actions, property damage, personal injury (including death), costs and expenses, or other harm for which recovery of damages is sought, under any theory including tort, contract, statute or strict liability, including attorney fees and other legal expenses, including those related to environmental hazards on or under the leased premises or at the drill site or operations site or in any way related to Lessee's failure to comply with any and all environmental laws; those arising from or in any way related to Lessee's operations or any other of Lessee's activities in, on or under the leased premises or at the drill site or operations site; those arising from Lessee's use of the surface or subsurface of the leased premises; and those that may arise out of or be occasioned by Lessee's breach of any of the terms or provisions of this Lease or any other act or omission of Lessee, its directors, officers, employees, partners, agents, contractors, subcontractors, guests, invitees and their respective successors and assigns. Each assignee of this Lease, or of an interest herein, agrees to be liable for, exonerate, indemnify, defend and hold harmless the Lessor Parties in the same manner provided above in connection with the activities of Lessee, its officers, employees and agents as described above. EXCEPT AS OTHERWISE EXPRESSLY LIMITED HEREIN, ALL OF THE INDEMNITY OBLIGATIONS AND/OR LIABILITIES ASSUMED UNDER THE TERMS OF THIS LEASE SHALL BE WITHOUT LIMITS AND WITHOUT REGARD TO THE CAUSE OR CAUSES THEREOF (EXCLUDING PRE-EXISTING CONDITIONS), STRICT LIABILITY OR THE NEGLIGENCE OF ANY PARTY OR PARTIES (INCLUDING THE NEGLIGENCE OF THE INDEMNIFIED PARTY), WHETHER SUCH NEGLIGENCE BE SOLE, JOINT, CONCURRENT, ACTIVE OR PASSIVE.

**14. Notices.** All notices required or contemplated by this Lease shall be directed to the party being notified at the address identified above, unless notice of another address has been provided in writing. All such notices shall be made by registered or certified mail, return receipt requested, unless another means of delivery is expressly stated.

**15. No Warranty of Title.** Lessor makes no warranty of any kind with respect to title to the surface or mineral estate in the leased premises or any portion of or interest therein. All warranties that might arise by common law or by statute, including but not limited to Section 5.023 of the Texas Property Code (or its successor), are excluded. By acceptance of this Lease, Lessee acknowledges that it has been given full opportunity to investigate and has conducted sufficient investigation to satisfy itself as to the title to the leased premises. Lessee assumes all risk of title failures.

**16. Top Leasing Permitted.** There shall be no prohibition or limitation on top leasing.

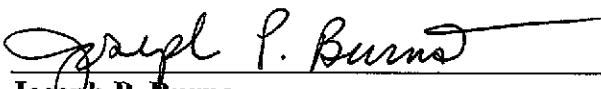
**17. Venue and Legal Fees.** Venue for any dispute arising under this Lease shall lie in Tarrant County, Texas, where all obligations under this Lease are performable.

**18. Miscellaneous.** This Lease is entered into in the State of Texas and shall be construed, interpreted and enforced in accordance with the laws of the State of Texas without reference to choice-of-law rules. Should any of the provisions herein be determined to be invalid by a court of competent jurisdiction, it is agreed that this shall not affect the enforceability of any other provision herein and that the parties shall attempt in good faith to renegotiate that provision so determined to be invalid to effectuate the purpose of and to conform to the law regarding such provision. The section titles appearing in this Lease are for convenience only and shall not by themselves determine the construction of this Lease. This Lease may be executed in one or more counterparts, each of which shall be deemed an original, but all of which shall constitute one and the same instrument. Singular and plural terms, as well as terms stated in the masculine,

feminine or neuter gender, shall be read to include the other(s) as the context requires effectuating the full purposes of this Lease.

19. XTO Energy Inc. agrees that all royalties accruing to Lessor under this lease shall not be conditioned upon execution by Lessor of a Division Order that does not contain the minimum statutory requirements of the State of Texas.

**IN WITNESS WHEREOF**, this Lease is executed to be effective as of the date first written above, but upon execution shall be binding on each signatory and the signatory's heirs, devisees, executors, administrators, successors and assigns, whether or not this Lease has been executed by all parties hereinabove named as Lessor.

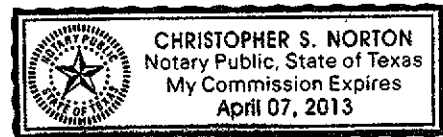
  
\_\_\_\_\_  
Joseph P. Burns

---

ACKNOWLEDGEMENT

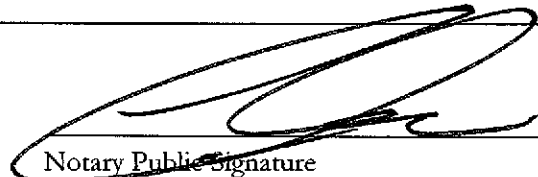
STATE OF TEXAS )

COUNTY OF TARRANT )



This instrument was acknowledged before me on the 15<sup>TH</sup> day of July, 2010, by

Joseph P. Burns, a single person

  
\_\_\_\_\_  
Notary Public Signature

**EXHIBIT "A"**

**Attached as part of Oil and Gas Lease dated July 15, 2010, between  
Joseph P. Burns, a single person  
as Lessor, and XTO Energy Inc. as Lessee**

**0.5233 of an acre, more or less, being a called 0.2754 of an acre, situated in the Joshua N. Ellis Survey, A-463, Tarrant County, Texas, being Lot 1, Block 1, Ryan Place Addition, an Addition to the City of Fort Worth, Tarrant County, Texas, according to the Plat thereof recorded in Volume 310, Page 80, Plat Records, Tarrant County, Texas, and being more particularly described in that certain Warranty Deed, dated December 15, 1998, from Roy Edwin Dowdle, a married man, not being joined by my wife as the hereinafter described property constitutes no part of our business or residential homestead, to Joseph P. Burns, as recorded in Volume 13570, Page 360, Official Public Records, Tarrant County, Texas.**

**SIGNED FOR IDENTIFICATION ONLY:**

---

**Joseph P. Burns**